

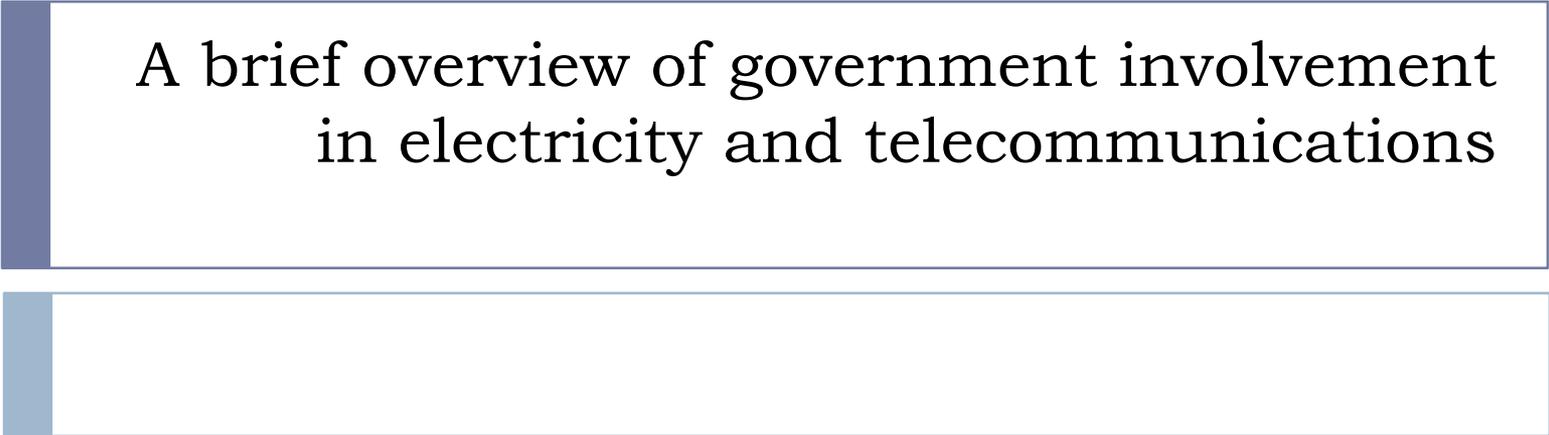
100 years of government control over public utilities

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Introduction

- ❑ What do we know about the reasons *why* governments have sought to control public utilities over the past 100 years?
- ❑ Has the rationale for government intervention changed during this time? If so, how?
- ❑ Seek to examine the reasons for the government intervention then (and now) with particular reference to electricity and telecommunications in Australia.
- ❑ To begin, a brief one page (non-historian's) account of the key changes in government control/intervention in electricity and telecommunications sectors from 1880's to today.

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A brief overview of government involvement
in electricity and telecommunications

Electricity: from local to state to federal oversight

- ❑ Electricity commercially viable in Australia from late 1880's.
- ❑ Initially generation, transmission/distribution and supply carried out on a small scale close to consumer.
- ❑ Considerable private involvement (two private companies in Melbourne in 1900).
- ❑ Companies were given exclusive franchises for their areas. Local governments also played a role.
- ❑ Between 1880's and 1920's: only a limited role for state government.
- ❑ After WWI, state governments became interested and statutory corporations established: Tasmania (1914); Victoria (1918); NSW (1935); Queensland (1938); SA (1943) and WA (1946).
- ❑ By 1950's private ownership had virtually disappeared across all of the States.
- ❑ State Commissions now supplied (directly or indirectly) over 90% of electricity consumed (98.5% in Victoria).

Telecoms: from federal oversight to the local exchange

- ❑ Federal government took control of telegraph services from the colonies on 1 January 1901. The monopoly was vested in Departmental hands: the Post Master General (PMG). PMG was a significant enterprise: at one stage 16,000 employees, representing 90% of Commonwealth staff.
- ❑ Sector subject to a number of Royal Commission's, the earliest being 1904 . At one such Royal Commission in 1910, Alexander Graham Bell argued against government control (by ownership) on basis that it would “interfere with improvements of inventors by stopping financial rewards before them”.
- ❑ In 1922, a joint commercial/government agreement in relation to wireless (AWA/PMG). The first public-private partnership in Australian communications (did not go smoothly: recurring tensions about pricing, and excessive profits of AWA).
- ❑ 1977: a taskforce was established to reconsider the traditional arguments regarding a single communications system.1982: the Davidson report recommended that private operators be able to interconnect and resell capacity.1991: A private competitor was introduced (Optus); 1999 Part XIC commitments to examine merits of separating competitive elements.
- ❑ 2008: ACCC recommends that regulation no longer apply to wholesale line rental and calls to certain exchanges where there are at least three or more competitors (subsequently overturned by Australian Competition Tribunal).

Government control to achieve socially
desirable pricing

Cross-subsidisation as a rationale for government intervention

- ❑ Why is it that certain utility services (water, gas, electricity, telecoms, transport services) have been singled out over time in Australia (and elsewhere) for very specific government control/intervention, especially in terms of pricing?
- ❑ A traditional response is that some aspects of the supply of utility services have particular *economic* characteristics (combination of heavy fixed costs, high entry barriers and inelastic demand) and are therefore best supplied by a single firm.
 - ❑ Cost conditions such that larger output would mean lower average costs per unit; an impossibility of more than one firm being profitable at any one time; wasted resources if more than one firm supplying the service/product.
 - ❑ Social advantage will be maximised if charges are not higher than marginal cost.
- ❑ However, they also have particular political characteristics which invite governments to intervene in these industries.
 - ❑ Charles Adams equated the pricing power of monopolies as similar to the power to tax, and suggested that for this reason regulation would always inescapably be a political activity.
 - ❑ JS Mill (1848) noted that for 'practical monopolies' (gas and water companies) it is the part of the government, either to subject the business to reasonable conditions for the general advantage, or to retain such power over it, that the profits of the monopoly may at least be obtained for the public.

Cross-subsidisation as a rationale for government intervention

- ❑ One recurring issue for government is: *how can it balance the political issue of allowing essentially similar services to be sold at vastly different prices to differently situated customers (city and the bush)?*
 - ❑ Two buyers (high cost and low cost) both, in principle, have equal political importance.
- ❑ An immediate rationale, therefore, for government intervention in utilities is to offset the effect of market forces on the division of rents between producers and consumers, and in particular to preserve a 'politically optimum distribution of rents'.
 - ❑ That is, intervention is driven, in part, by the desire to achieve a political objective by transforming the monopoly rent (the tax) and turn it into subsidies through its determination of the price structure.

Cross-subsidy in electricity

- ❑ State electricity commissions were established as statutory authorities and were therefore free of direct government control of tariffs (unlike telecoms).
- ❑ In many states, electricity pricing was historically seen as a means of pursuing social objectives (access for all areas at economical prices).
- ❑ Tariff structure was constantly challenged by ‘the bush’ on basis that it was ‘unfair’: wanted equalisation of city and country tariffs.
- ❑ However, in Victoria, in the 1920’s the SECV developed a cost-based pricing approach and forcefully resisted the imposition of full uniform pricing.
 - ❑ Full equalisation resisted until mid century (1965), when tariffs that were charged involved a considerable cross-subsidisation of rural and regional consumers by urban customers.

Cross-subsidy in telecommunications

- ❑ From Federation until 1907 a 'colonial flat rate' was charged whereby all subscribers paid the same charge irrespective of usage.
- ❑ From the early days there was significant debate as to whether the PMG should run at a loss, to assist the development of the country ('the bush'), or if it should be run as a commercial concern.
- ❑ 1907 Royal Commission argued in favour of the former noting that it should be a 'complete financial proposition': those parts of the service making profits should cross-subsidise those that did not.
- ❑ By the 1950's clear that there was considerable cross-subsidisation of telephone services from the trunk lines to rural areas.

Is cross subsidisation still a rationale for government intervention today?

- ❑ In many jurisdictions concerns about the effects of allowing utility network services to be charged at different prices to different consumers remain (intervention not merely about exploitation of market power).
- ❑ These concerns are also creeping into non-network (ie.: competitive) activities on basis of concerns that the competitive *process* has not adequately addressed the issue of differential pricing; there remains a need to mandate a 'competitive *outcome*'.
 - ❑ Many consumers are not benefiting fully from the competitive market, and some consumers are disproportionately affected.
- ❑ Electricity
 - ❑ Focus on the inter-generational subsidies in terms of investments in the grid to fund ambitious renewable targets.
 - ❑ In retail markets, considerable concern in some jurisdictions about 'vulnerable' and 'inert consumers' . This has lead to restrictions of ability of suppliers to charge different prices for different consumers; 'unfair pricing differentials' be eliminated.
- ❑ Telecommunications
 - ❑ The debate about differential charges for network access in different bands and regions continues to be fraught.
 - ❑ Issues about the distributional impacts of fixed and mobile cross-subsidisation through termination rates.

Government control and 'nation-building'

Nation-building as a rationale for government intervention

□ Boehm *Economic Record* (1956):

The fundamental explanation of the different pattern of ownership in Australia from that in the United States is the initiative taken here by State Governments to ensure as far as possible the desired pace of development along the lines which they believed a virtual monopoly of such widespread and basic importance as electricity should progress. Statesmen, intent upon Australia—although a relatively young economy—achieving a vigorous economic and social growth in keeping as far as possible with the standards set by the highly industrialized countries of the Western world, have from an early date urged and accepted as necessary State operation of public services, especially transport, water, and more recently electricity.²⁴

Nation-building: electricity

- ❑ Concerns about the need for the ‘coordination’ of the expansion of the network one of the key reasons for the shift from local to state to Federal control.
- ❑ Victorian Parliamentary Debate (1918): “In a young and expanding economy State control would ensure the desired pace of development of this virtual monopoly *along proper lines*”.
- ❑ In early years, there was also the concern that given underdeveloped nature of Australian capital markets that funds could not be mobilised to undertake such large investments.
 - ❑ Fear that a series of smaller, non-interconnected grids would result.

Nation-building: communications

- ❑ Persistent concerns about the pace of technological advancement and technological compatibility.
- ❑ Specifically, view that that private operators would not have the appropriate incentives to invest in the latest technology when necessary.
- ❑ Also coordination-type concerns: too many operators with different technologies would lead to fragmentation and network incompatibility.

Is 'nation-building' still a rationale for government intervention?

- ❑ Utility infrastructure still considered to be inextricably tied to the prosperity of the nation in many jurisdictions.
 - ❑ *As general economic growth proceeds, the contribution of these industries to further expansion is thus enhanced by their realisation of economies of scale, in a cumulative and self-reinforcing process. (A E Kahn The Economics of Regulation Principles and Institutions 1988)*
- ❑ Electricity:
 - ❑ Challenges relating to the development of a 'low carbon' economy again raise significant coordination issues across jurisdictions.
 - ❑ Likened by some to a 'wartime' challenge that necessitates a strong government-led intervention.
- ❑ Communications:
 - ❑ Next generation networks and international comparative advantage.

Government control to secure the broader
'public interest'

The broader public interest: electricity

- ❑ In electricity, historically government control in the Australian states premised on the basis of ‘public interest’ to ensure:
 - ❑ Security – in the form of reliability, continuity and sufficiency of supply.
 - ❑ Economy – the cheapest supply to customers.
- ❑ In addition, the public interest remit also extended to financing new investments, there was a perception of a lack of private incentives to ‘nurture’ large investments:

“It could be difficult for a private authority to justify to its shareholders any investment which, while in the public interest, would not provide an adequate return within a short time.”

The broader public interest: telecommunications

- ❑ Two 'public interest' issues that the government was historically concerned about in telecommunications:
 - ❑ Universal access – services simply would not be provided in unprofitable areas because of vast differences and enormous expense in taking services to all.
 - ❑ Technological advancement – private operators would not have the right incentives to keep pace with latest technology.
- ❑ More generally, the PMG was, to some extent, always seen as an instrument of government's development and redistributive policies.
- ❑ Consequently , the provision, operation and pricing of infrastructure reflected contemporaneous understandings of the 'public interest' and the 'national interest'.

“[T]his is a department that exercises a most important influence on the whole of the community. It is closely connected with the political, the commercial, the industrial and the social life of the community”

Does a broader public interest rationale for intervention still exist?

- ❑ Some of the broader ‘public interest’ reasons for government intervention appear to remain current (ie: protect against monopolistic abuse, security of supply etc..)
- ❑ However, in some jurisdictions, new objectives have recently been introduced into the regulatory remit:
 - ❑ environmental impacts;
 - ❑ social and ‘citizens’ interests;
 - ❑ facilitate market innovation and encourage investment.
- ❑ Question about whether the addition of the new objectives cumulatively approximate the ‘public interest’ as used in earlier times.



Concluding thoughts



Concluding thoughts (1)

- ❑ There are clearly some important differences in the scope and form of government intervention observed today:
 - ❑ Independent regulatory authorities rather than Statutory commissions or ministerial departments;
 - ❑ Considerable ‘unbundling’ of various activities previously thought to be natural monopolies (opening up to competition);
 - ❑ Private versus public ownership (influence of shareholders);
 - ❑ A broader institutional and legal framework: consultation, rights of appeal etc.
 - ❑ Move from a public service decision making process to broader participation in the regulatory process (role of consumer groups).

Concluding thoughts (2)

- ❑ Nevertheless, some of the historic rationales for government intervention appear to remain current:
 - ❑ The need for affordable universal access to essential services (although new tensions exist with competition);
 - ❑ Concerns about the market's ability to adapt to coordinate itself (electricity) and to adapt to technological change (communications);
 - ❑ Mismatch between private incentives for investment and the social incentives (transmission lines, broadband);
 - ❑ The need to consider broader 'public interest' objectives: 'environmental', 'social', 'citizens interests'. Cumulatively, do these objectives approximate 'the public interest'?